

MARCH 16, 1978

## SPACE ENDURANCE RECORD

ANNCR:

TWO SOVIET COSMONAUTS HAVE RETURNED TO EARTH FOLLOWING THE SUCCESSFUL CONCLUSION OF A NINETY-SIX DAY FLIGHT ABOARD THEIR SALYUT SIX SPACE STATION. VOA SCIENCE EDITOR LASZLO DOSA PREPARED THE FOLLOWING BACKGROUND REPORT.

VOICE:

COSMONAUTS YURIY ROMANENKO AND GEORGIY GRECHKO CAN CLAIM MANY IMPORTANT "FIRSTS." THEIR FLIGHT EXCEEDED BY TWELVE DAYS THE PREVIOUS SPACE ENDURANCE RECORD OF TWELVE WEEKS HELD FOR FOUR YEARS BY AMERICAN ASTRONAUTS GERALD CARR, WILLIAM POGUE AND DOCTOR EDWARD GIBSON ABOARD THEIR SKYLAB SPACE STATION.

ON TWO SEPARATE OCCASION, THE TWO SOVIET SPACEMEN RECEIVED VISITORS FROM EARTH. THIS WAS NOT ENTIRELY UNPRECEDENTED BECAUSE IN THE SUMMER OF 1975, DURING THE JOINT AMERICAN-SOVIET APOLLO-SOYUZ MISSION, THE SPACECRAFT OF THE TWO NATIONS MET AND DOCKED IN EARTH ORBIT, AND THE COSMONAUTS AND ASTRONAUTS EXCHANGED SEVERAL VISITS. WHAT WAS UNPRECEDENTED DURING THE JUST CONCLUDED SALYUT MISSION HAS BEEN THE PRESENCE OF A CZECHOSLOVAK COSMONAUT WHO HOLDS THE DISTINCTION OF BEING THE FIRST PERSON FROM OUTSIDE THE UNITED STATES OR THE SOVIET UNION TO FLY IN SPACE.

PERHAPS THE MOST IMPORTANT EVENT OF THE SOVIET MISSION HAS BEEN THE RESUPPLY OF THE SALYUT SPACE STATION BY A SOYUZ VEHICLE WHICH BROUGHT FUEL AND OTHER NECESSITIES TO ROMANENKO AND GRECHKO. EVEN THOUGH VEHICLES -- MANNED OR UNMANNED -- HAVE DOCKED MANY TIMES BEFORE IN SPACE -- IT WAS A ROUTINE EXERCISE DURING THE AMERICAN MISSIONS TO THE MOON -- THE TRANSFER OF VOLATILE ROCKET FUEL AND SIMILAR SUPPLIES FROM ONE SPACECRAFT TO ANOTHER

HAS NOT BEEN PERFORMED BEFORE.

THE ENDURANCE RECORD SET BY THE TWO COSMONAUTS ONLY SERVES TO UNDERSCORE THE PREVIOUSLY ESTABLISHED FACT THAT MAN IS CAPABLE OF LIVING AND WORKING FOR EXTENDED PERIODS OF TIME IN THE WEIGHTLESS ENVIRONMENT OF SPACE. THE MEDICAL EXPERIMENTS PERFORMED BY THE COSMONAUTS MAY ADD SOME FURTHER DETAIL TO THE WEALTH OF DATA OBTAINED DURING THE SKYLAB MISSIONS.

THE RESUPPLY OF SALYUT SIX, AS WELL AS THE BRIEF VISITS RECEIVED BY THE CREW FROM THEIR COLLEAGUES, ARE IN ACCORD WITH THE OFTEN STATED SOVIET GOAL OF ESTABLISHING PERMANENT STATIONS IN EARTH ORBIT. THE MISSION OF ROMANENKO AND GRECHKO DEMONSTRATED THE FEASIBILITY OF SUCH A GOAL. BUT THE METHOD THE SOVIET UNION HAS CHOSEN TO WORK TOWARD THAT GOAL IS A VERY COSTLY ONE. EACH RESUPPLY MISSION AND EACH VISIT TO THE SOVIET SPACE STATION REQUIRES THE USE OF AN EXPENSIVE LAUNCH VEHICLE.

THE UNITED STATES AT THE PRESENT TIME DOES NOT HAVE ANY FIRM PLANS TO ESTABLISH SPACE STATIONS. HOWEVER, SHOULD SUCH A DECISION BE MADE IN THE FUTURE, AMERICA WILL HAVE THE SPACE SHUTTLE TO SERVE AS A TRANSPORTATION VEHICLE BETWEEN EARTH AND EARTH ORBIT. THE SHUTTLE, GOING UP AS A ROCKET AND COMING BACK AS AN AIRPLANE, WILL BE REUSABLE MANY TIMES, MAKING SPACE FLIGHT MUCH MORE ECONOMICAL.

THE SHUTTLE WILL CARRY INTO ORBIT A VERSATILE LABORATORY, DESIGNED AND BUILT BY MEMBER NATIONS OF THE EUROPEAN SPACE AGENCY. AND THE SPACELAB WILL BE MANNED BY SCIENTISTS FROM A NUMBER OF OTHER NATIONS. IN FACT, THERE HAVE BEEN PRELIMINARY DISCUSSIONS BETWEEN AMERICAN AND SOVIET OFFICIALS ABOUT THE POSSIBILITY OF SOME FUTURE JOINT PROJECT WITH THE SPACE SHUTTLE.

THE SUCCESSFUL MISSION OF ROMANENKO AND GRECHKO HAS DEMONSTRATED THAT DESPITE EARLIER MISHAPS AND REVERSES, THE

SOVIET UNION REMAINS VERY MUCH INVOLVED IN THE FURTHER DEVELOPMENT OF MANNED SPACE FLIGHT CAPABILITIES. A YEAR FROM NOW WHEN THE SHUTTLE IS SCHEDULED TO BEGIN ITS ORBITAL FLIGHTS, AMERICAN ASTRONAUTS WILL ALSO, ONCE AGAIN, RETURN TO SPACE.

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